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IN THE  
**Supreme Court of the United States**  
OCTOBER TERM, 1995

WARNER-JENKINSON COMPANY, INC.,  
*Petitioner,*

v.

HILTON DAVIS CHEMICAL CO.,  
*Respondent.*

On Writ of Certiorari to the  
United States Court of Appeals  
for the Federal Circuit

BRIEF OF AMICUS CURIAE  
MCI TELECOMMUNICATIONS CORPORATION  
IN SUPPORT OF PETITIONER

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BRIEF OF AMICUS CURIAE  
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IN SUPPORT OF PETITIONER

INTEREST OF AMICUS CURIAE <sup>1</sup>

MCI Telecommunications Corporation ("MCI") is a major corporation involved in, or in the process of entering, a variety of high technology fields, including telecommunications, personal communications, and on-line and direct broadcast satellite services. MCI operates in a segment of the economy where technical innovation is essential. From the beginning, MCI has relied on high technology to offer innovative services at lower costs. The expansion of the doctrine of equivalents by the court below threatens strongly competitive and rapidly changing fields such as computers and electronics, on which

<sup>1</sup> The parties have consented to the submission of this brief. Their letters of consent have been filed with the Clerk of this Court.

companies such as MCI rely, by injecting increased uncertainty which discourages innovation.

### INTRODUCTION AND SUMMARY OF ARGUMENT

The doctrine of equivalents, especially as unleashed by the decision below, is no longer needed to foster or enforce the patent bargain and indeed threatens to undermine that bargain and the goals it is intended to further. Nonetheless, there may be a legitimate role for a carefully limited doctrine of equivalents today. As this Court began to suggest in *Graver Tank & Mfg. Co. v. Linde Air Products Co.*, 339 U.S. 605 (1950), the last occasion on which this Court addressed the question, it may be justifiable to preserve a doctrine of equivalents that operates as an equitable rule, coming into play when there is evidence that the defendant copied the patented invention, making only insubstantial changes designed solely to evade liability for literal infringement. Such a doctrine would be focused on ameliorating the risks created by requiring a patent holder to disclose the invention, while protecting only those inventions actually conceived by the patent holder.

1. The decision below frustrates Congress' goals by permitting virtually unguided juries to grant patent holders large and unpredictable penumbras around each claim long after a patent issues. Such a rule plays no legitimate role in the current patent system and generates a level of uncertainty that discourages innovation. Point I.

2. A more limited and precisely focused doctrine of equivalents could supplement the statutorily defined patent system without discouraging innovation if it were aimed specifically at providing relief from deliberate copying of a patented invention, when the copyist is sufficiently canny to introduce minor variations that pull the copy just outside the scope of the claims. Point II.A.

3. The application of three historically recognized limits would help to ensure that the doctrine does not en-

snare genuine innovations produced by "designing around" a patent, innovations the patent system is intended to encourage. Point II.B.

4. Such a doctrine would be grounded in the courts' equitable jurisdiction. Its application, therefore, would be properly consigned to the judge rather than a jury. Point III.

### ARGUMENT

#### I. THE DECISION BELOW MISCONSTRUES THE MODERN ROLE OF THE DOCTRINE OF EQUIVALENTS AND IS INCONSISTENT WITH THE TERMS AND PURPOSES OF THE PATENT STATUTE.

In the Federal Circuit's recent jurisprudence, culminating in the decision below, the doctrine of equivalents has ballooned into a central component of almost every patent case—a rule that substantially expands the monopolies of patent holders, permitting them to claim protection of inventions outside the actual scope of what they invented and claimed in their patent applications. It is time to recognize that such a doctrine is inconsistent with the statutory scheme provided by Congress, and indeed, undermines Congress' goals by discouraging innovation.

##### A. A Broad and Vague Doctrine of Equivalents Has No Legitimate Role in Modern Patent Law.

The so-called doctrine of equivalents has at best a somewhat amorphous and not wholly articulated history. It emerged at a time when patented inventions were typically described solely in detailed specifications and drawings, or in detailed specifications and drawings supplemented vaguely with such phrases as "or the substantial equivalent." Reflecting that reality, this Court held that the inventions of patent holders also included minor variations of what was specifically described.

In doing so, the Court appeared to be propounding a doctrine relative to properly defining the scope of protection conferred by a patent. In other words, the doctrine of equivalents appears to have initially been an interpretive gloss on the scope of the patent to the effect that patents were understood to reach not only the specific embodiment detailed in the specifications and drawings but also any embodiment employing the particular mode of operation actually invented by the patentee. An early case, *Winans v. Denmead*, held that a patentee's specifications should not be construed to disclaim embodiments of his invention if they can "fairly be construed" to include them. 56 U.S. (15 How.) 330, 341 (1853).

During the following century, this Court imposed two boundaries on the doctrine. First, the Court held the doctrine mainly applicable to "pioneer" inventions, applying little if at all in construing the scope of improvements to existing machines or processes. See, e.g., *Morley Sewing-Machine Co. v. Lancaster*, 129 U.S. 263, 273 (1889) (pioneer invention "entitled to a liberal construction of the claims of his patent"); *Knapp v. Morss*, 150 U.S. 221 (1893) (mere improvement not entitled to broad construction). Second, the Court held that disclaimers during patent prosecution were final; patent holders could not reclaim, by resort to the doctrine of equivalents, the definitions of their inventions they had surrendered in the process of acquiring the patent. See, e.g., *I.T.S. Rubber Co. v. Essex Rubber Co.*, 272 U.S. 429, 443-44 (1926) (an element or broader scope voluntarily surrendered to overcome a Patent Office rejection may not be regained through application of the doctrine of equivalents).

Congress also recognized the difficulty created by the specification approach and enacted several amendments to the patent statute which, over time, have developed into the very different claiming system. In current practice, issued patents include not only detailed specifications and drawings of the specific embodiment the inventor has

reduced to practice but also a series of broad and intermediate claims which describe the invention at more abstract levels and thus sweep in other embodiments of the same invention.<sup>2</sup> Indeed, modern claiming practice performs the very function undertaken by the courts in earlier times by means of the doctrine of equivalents. Thus, long before a judge has occasion to construe the terms of a patent, the patent applicant, and his attorneys, are not only permitted, but required, to construe liberally the scope of the detailed specification to include substantial equivalents in order to define the full scope of the invention.<sup>3</sup>

Perhaps responding to the changing practice, this Court's doctrine of equivalents decisions in the 1930s and 1940s focused mostly on limitations to the doctrine. See, e.g., *Smith v. Magic City Kennel Club, Inc.*, 282 U.S. 784 (1931) (broad claim surrendered in response to Patent Office rejection cannot be reclaimed through doctrine of equivalents); *Schriber-Schroth Co. v. Cleveland Trust Co.*, 311 U.S. 211, 221 (1940) (even where abandoned claim narrower than granted one, abandoned claim cannot be revived by resort to the doctrine of equivalents because of the "injurious consequences" to the public and other inventors). In another case, *Exhibit Supply Co. v. Ace Patents Corp.*, the Court noted a challenge to the continued legitimacy of the doctrine, and although not

<sup>2</sup> See 3 Lipscomb's Walker on Patents § 11.1 at 284; § 11.2 at 290-91, § 11.3 at 292-300 (1985); Burton Amernick, Patent Law for the Nonlawyer 40 (1986).

<sup>3</sup> See 2 Donald S. Chisum, Patents § 8.02[2], [4] (1995); Act of July 8, 1870, ch. 230, § 26, 16 Stat. 198; Act of July 19, 1952, Pub. L. No. 82-593, ch. 11, § 112, 66 Stat. 798; Act of July 24, 1965, Pub. L. No. 89-83, § 9, 79 Stat. 261; Act of Nov. 14, 1975, Pub. L. No. 94-131, § 7, 89 Stat. 691. Thus, in the patent at issue in the *Markman v. Westview Instruments, Inc.* case before this Court (No. 95-26), U.S. Patent Re. 33,054, the elements of claim 1 are described in typically broad terms, e.g., "a data input device for manual operation," "a data processor including memory" which can record and store certain information, and an "optical scanner."

required to reach the question in that case, expressly left it open. 315 U.S. 126, 136 (1942) (finding the patentee not entitled to recover, "[w]hatever may be the appropriate scope and application of the doctrine of equivalents").

When, eight years later, this Court did address the question in *Graver Tank*, the doctrine of equivalents that emerged had a new justification and what appeared to be a narrower application. Without expressly stating that the doctrine had been revisited, the opinion cast the doctrine not as an aid to proper claim construction, but as a means by which courts could prevent injustice when the letter of the law was unavailing. *Graver Tank*, for the first time, discussed the doctrine of equivalents not as a means of interpreting the words of a patent, but as a separate inquiry resorted to after the meaning of the words of the patent had been determined and a claim of literal infringement rejected. 339 U.S. at 607. See Robert Meeks, *Metaphors of Infringement and Equivalence: The Solution of Our Problems*, 2 J. Intell. Prop. L. 279, 291 (1994) (noting that this approach originated in *Graver Tank*); see also, e.g., *Palumbo v. Don-Joy Co.*, 762 F.2d 969 (Fed. Cir. 1985) (distinguishing between literal infringement and infringement under the doctrine of equivalents).

As recharacterized, the doctrine in many ways paralleled the "inequitable conduct" doctrine the Court had fashioned a few years before. See *Precision Instrument Mfg. Co. v. Automotive Maintenance Mach.*, 324 U.S. 806 (1945) (barring enforcement of patent obtained through patentee's failure to disclose material information to patent office). In *Precision Instrument*, the Court recognized a duty to disclose all material information while prosecuting a patent application in order to avoid frauds on the Patent Office; in *Graver Tank*, the Court explained that the "essence" of the doctrine of equivalents "is that one may not practice a fraud on a

patent." 339 U.S. at 608. Such fraud is committed, the Court explained, by unsavory behavior by "an unscrupulous copyist" who by making "unimportant and insubstantial changes and substitutions . . . adding nothing" could otherwise "take the copied matter outside the claim, and hence outside the reach of the law." *Id.* at 607. Just as the inequitable conduct doctrine was a judicially fashioned bulwark protecting the public against unscrupulous patent applicants, the doctrine of equivalents was a judicially fashioned bulwark protecting patent holders from unscrupulous copyists.

*Graver Tank* singled out *Winans v. Denmead* as the source of the doctrine. The defendant in *Winans* had not simply used a device similar to the plaintiff's, he had walked into the plaintiff's shop, examined and measured the plaintiff's invention (a new type of railroad car), and then constructed a railroad car along the same principles, but of a slightly different shape. 56 U.S. (15 How.) at 332. *Graver Tank* further underscored its emphasis on the doctrine of equivalents as an extra-statutory power to prevent unjust outcomes by expressly confirming the trial court's finding that the accused product was "the result of imitation rather than experimentation or invention." *Graver Tank*, 339 U.S. at 612.

In contrast, the doctrine of equivalents as set forth in the decision below provides patent holders with more power to exclude than either the traditional doctrine of equivalents or the doctrine of equivalents reinvented in *Graver Tank*. Despite the now well-established routine practice of broad claiming by patent applicants, under the Federal Circuit's doctrine of equivalents, after an inventor has set forth the most liberal constructions of the invention that either he or his lawyers can imagine, in as many separate claims as they choose, courts are permitted to look at someone else's invention to arrive at an even broader construction.

Furthermore, the Federal Circuit has removed or cut back every limit ever placed by this Court on earlier versions of the doctrine. The power over additional categories of processes and products is made available to holders of all patents, whether pioneer inventions or bare improvements. Voluntary disclaimers during patent prosecution do not operate as a bar unless actually necessary to avoid prior art. Evidence or inference of copying is not a prerequisite to application of the doctrine. And the decision as to the range beyond the written claims a patent holder may control is left to the virtually unguided discretion of juries. None of this is mandated by this Court's previous jurisprudence, and none of it is advisable to establish or protect the patent bargain.

**B. A Broad and Vague Doctrine of Equivalents Threatens to Undermine the Goals of the Patent Act.**

The decision below is inconsistent with the rationale of patent law, which offers a bargain to inventors—the power to exclude for a limited number of years in return for disclosing their inventions—in order to benefit the public. See *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S. 141, 151 (1989). If not reversed, the decision will skew the patent bargain, providing patent holders with control over more than they invented and more than they disclosed—upsetting the “careful balance between the need to promote innovation and the recognition that imitation and refinement through imitation are both necessary to invention itself and the very lifeblood of a competitive economy.” *Id.* at 146.

Even before the decision below eliminated most remaining restraints on the doctrine of equivalents, the doctrine had become, in the Federal Circuit's jurisprudence, an issue of “maximum vagueness,”<sup>4</sup> and the “primary . . .

<sup>4</sup> Judge Paul Michel, *The Challenge Ahead: Increasing Predictability in Federal Circuit Jurisprudence for the New Century*, 43 Am. U. L. Rev. 1231, 1244 (1994) (hereinafter “Judge Michel”).

cause of the current uncertainty surrounding the scope of patent claims.”<sup>5</sup>

As this Court has long recognized, uncertainty sabotages the patent law's goal of encouraging innovation,<sup>6</sup> by raising the risks of experimentation to other innovators. It leaves others without fair notice as to the areas in which they may operate without risking punishing litigation and potentially confiscatory penalties. This hinders business decisions about the direction research and development should take and inventors' decisions about what areas to avoid. The Federal Circuit's doctrine permits abusive infringement suits bringing considerable pressure on innocent inventors to settle.<sup>7</sup> And it leaves the public with less experimentation, fewer improvements, and ultimately less invention.

Complaints about the doctrine discouraging research and innovation are commonplace, especially in our cutting-edge industries. See, e.g., Amy Carroll, *Not Always the Best Medicine: BioTechnology and the Global Impact of United States Patent Law*, 44 Am. U. L. Rev. 2433, 2490-91 (1995) (lenient application of the doctrine of equivalents to biotech patents “is detrimental to increased research and competitiveness”); Martha Ferziger, *Monopolies on Addiction: Should Recreational Drugs Be Patentable*, 1994 U. Chi. Legal F. 471, 481

<sup>5</sup> Martin Adelman & Gary Francione, *The Doctrine of Equivalents in Patent Law: Questions that Pennwalt Did Not Answer*, 137 U. Pa. L. Rev. 673, 682 (1989) (hereinafter “Adelman & Francione”).

<sup>6</sup> See *United Carbon Co. v. Binney & Smith Co.*, 317 U.S. 228, 236 (1942) (“A zone of uncertainty which enterprise and experimentation may enter only at the risk of infringement claims would discourage invention only a little less than unequivocal foreclosure of the field.”).

<sup>7</sup> See Adelman & Francione, *supra*, at 683; Martin Adelman, *The New World of Patents Created by the Court of Appeals for the Federal Circuit*, 20 U. Mich. J. L. Ref. 979, 996 (1987).

(effect of doctrine of equivalents is to discourage drug research); Rafael Zahraiddin, *The Effect of Broad Patent Scope on the Competitiveness of United States Industry*, 17 Del. J. Corp. L. 949, 955, 1002 (1992) (expanding patents by the doctrine of equivalents reduces the incentive for others to continue to innovate and develop the industry, posing "as great a threat as does foreign competition to the continued success of both the United States computer and electronics industry and the United States economy itself"); Michael Sanzo, *Patenting Biotherapeutics*, 20 Hofstra L. Rev. 387, 404 (1991) (doctrine of equivalents decision "inconsistent with the patent statute's objective of promoting innovation"); Robert Merges & Richard Nelson, *On the Complex Economics of Patent Scope*, 90 Colum. L. Rev. 839, 916 (1990) (expanding a patent via the doctrine of equivalents "diminishes incentives for others to stay in the invention game").

Having "failed to synthesize an articulable doctrine of equivalents jurisprudence"<sup>8</sup> before, the court below has now compounded the problem by rendering the doctrine of equivalents even more amorphous. It has abandoned its at least declared goal of a doctrine applied as an "exception . . . not the rule" and has eliminated any barrier to its becoming at least "the second prong of every infringement charge, regularly available to extend protection beyond the scope of the claims," and quite plausibly the first and only prong. *London v. Carson Pirie Scott & Co.*, 946 F.2d 1534, 1538 (Fed. Cir. 1991).

Anyone with an arguably related claim now has a chance to win an infringement suit tried before unguided jurors who are asked to determine what a "substantial" difference is in a highly technical field with which they are not familiar. Moreover, an invention may be termed "not substantially different" or composed of "not substantially

<sup>8</sup> Kurt Glitzenstein, *A Normative and Positive Analysis of the Scope of the Doctrine of Equivalents*, 7 Harv. J. of L. & Tech. 281, 290 (1994).

different" elements—on the ground that the elements were known to be interchangeable with those mentioned in the claims—even though the inventor and his attorneys were unable to think of that invention or its allegedly interchangeable elements at the time they were attempting to draft the broadest claims defensible.

In the doctrine as unleashed below, statutorily required "claims . . . cease to serve their intended purpose." *London*, 946 F.2d at 1538. They "effectively provide no notice" to the innovators and competitors on whom the public relies for future inventions.<sup>9</sup> The predictable impact on the "Progress of Science and useful Arts"<sup>10</sup> will be to deter progress even more substantially than the already "too uncertain" doctrine promulgated previously by that court.<sup>11</sup>

The premises of the patent bargain, "[t]he attractiveness of such a bargain, and its effectiveness in inducing creative effort and disclosure of the results of that effort, depend almost entirely on a backdrop of free competition in the exploitation of unpatented designs and innovations." *Bonito Boats*, 489 U.S. at 151. The decision below rips enormous and unpredictable holes in that backdrop, to the detriment of the scientific, engineering, and business communities—and therefore the public—in order to provide patent holders with windfalls they could not have expected and therefore did not rely on in choosing to invent and to disclose.

<sup>9</sup> Adelman & Francione, *supra*, at 683.

<sup>10</sup> U.S. Constitution, art. I, § 8.

<sup>11</sup> Judge Michel, *supra*, at 1236 ("The Application of the Doctrine of Equivalents is Too Uncertain."); see also Adelman & Francione, *supra*, at 676-77, writing in 1989 that in the first few years of the Federal Circuit's existence, it shifted the determination of the scope of patents away from the written and approved claims "through its routine use of the doctrine of equivalents."

## II. A CAREFULLY CABINED DOCTRINE OF EQUIVALENTS COULD SERVE RATHER THAN FRUSTRATE THE PURPOSES AND OPERATION OF THE PATENT STATUTE.

### A. A Modern Doctrine of Equivalents.

A modern doctrine of equivalents, as initially explored in *Graver Tank*, in contrast to that promulgated by the decision below, could serve to reinforce the patent bargain, if carefully cabined. As *Graver Tank* recognized, the requirement that a patentee disclose the invention creates a risk that the disclosure could be misused to permit someone, bent on infringing, to make the invention with sufficient minor variations to hover just outside the borders of the patent claims. Placing the inventor at the mercy of someone who is deliberately acting as a pirate, rather than as an inventor, could "foster concealment rather than disclosure of inventions," and therefore impede "one of the primary purposes of the patent system." 339 U.S. at 607.

Thus, even in a patent system in which broad claiming is standard practice, there may be room for a doctrine aimed at deliberate subterfuge. Such a doctrine would provide patent holders a right to recover when their inventions are deliberately copied, with sufficient but insubstantial changes to permit the copier to avoid liability under 35 U.S.C. § 271 (literal infringement). If aimed precisely, such a doctrine of equivalents should not engender the chaos created by the doctrine of equivalents' decisions of the court below. Those at risk under the doctrine would be notified by their own behavior. Others would risk liability only for literal infringement of the invention described in a published claim.

Because the doctrine would be aimed at providing relief from a fraud, rather than from literal infringement, its applicability would depend on the behavior of the alleged infringer as well as the characteristics of the accused product or process. That two manufacturers of the

same equipment might be treated differently under such a doctrine is consistent with the bargain proffered by patent law. A patentee discloses his invention in return for a limited enforceable monopoly. The patentee is not deprived of his bargain if a manufacturer invents equipment that is outside the scope of his patent claims, however "related." In contrast, the patentee is arguably deprived of his bargain if a second manufacturer takes advantage of the patent disclosure (or another public disclosure of the patented invention) to make equipment it could not otherwise have made, even if this manufacturer introduces insignificant changes to prevent the equipment from falling squarely within the claims. Arguably, patentees have not received the benefit of their bargains if they are prey to such copiers. In contrast, non-copiers, who also do not literally infringe, have neither taken unfair advantage of the disclosure nor trespassed on the monopoly actually requested by the inventor. Thus, the patent bargain is not furthered by permitting the patentee to exclude their inventions.

### B. Rules of Application.

The evolution beyond *Graver Tank* needed to govern a modern doctrine of equivalents is the development of more precise means for distinguishing between "unscrupulous copyists" and innovators designing around a patent. Mere knowledge of the patent or the patented product or process should not itself trigger liability for a related but distinguishable innovation. It is well recognized that patent disclosures, and other public disclosures of the patented product or process, can also serve as springboards for genuine innovation by others. "[O]ne of the benefits of the patent system is the incentive it provides for 'designing around' patented inventions, thus creating new innovations."<sup>12</sup>

#### 1. *Invention*

The inquiry should focus on whether the alleged copy is within the scope of what the patentee actually invented.

<sup>12</sup> *Read Corp. v. Portee, Inc.*, 970 F.2d 816, 828 (Fed. Cir. 1992).

In other words, recovery would not be available unless evidence from claims not at issue, the specification, or the patentee's contemporaneous disclosures establish that the patentee contemplated either the specific copy at issue or the extension of the patent necessary to encompass it.

In applying the doctrine of equivalents, courts have long employed the standard that the accused product must not have been anticipated by or obvious in light of prior art. See, e.g., *Wilson Sporting Goods Co. v. David Geoffrey & Assocs.*, 904 F.2d 677 (Fed. Cir.) (suggesting the use of hypothetical claims to make the determination), cert. denied, 498 U.S. 992 (1990). That standard, however, limits the inventor only to what he *could* have invented, not what he *did* invent. It is perforce only an outermost limit. If it is the only limit placed on the application of the doctrine, the doctrine provides patent holders with control over far more than they invent.

Such a windfall for patent holders is inconsistent with the patent bargain and with the public interest. To maintain the long recognized balance between rewarding inventors and encouraging a thriving and competitive economy, it is necessary to ask also whether the alleged copy, or the extension of the patent necessary to encompass it, was actually contemplated by the patent holder. Such a standard would scarcely be new to the doctrine of equivalents. See, e.g., *Ball & Socket Fastener Co. v. Kraetzer*, 150 U.S. 111, 117 (1893) (denying recovery because the accused device was "never contemplated" by the patent holder).

This is a standard that was clearly met in *Graver Tank*. The patent specification expressly stated that the chemical composition used in the accused copy could be substituted for the preferred composition. 339 U.S. at 613; Adelman & Francione, *supra*, at 700, 706-07. Moreover, the accused copy fell within the literal terms of a number of the patent claims as written and granted. *Id.* at 709.

However, those claims had been invalidated because they also claimed embodiments that were not workable. Thus, in *Graver Tank* there was more than adequate evidence that the accused product was contemplated by the patent holder as one embodiment of his invention, so that the finding of liability did not grant the patent holder control over more than his invention.

Where the specification and claims expressly include the very product or process at issue, as in *Graver Tank*, the application of the test will be simple. However, the court would not necessarily be limited to such evidence. It could also be instructive to look at, for example, publications by the patent holder before or around the same time as the patent application was filed or descriptions of the invention provided to his patent attorney. In addition, comparisons of the claims with the accused product may also prove an aid in determining whether the accused product or process was contemplated by the patent holder. For example, if the accused product or process is not only outside the claims of the patent but is also an improvement over the patented invention, either generally or in the context in which it is used, that would tend to suggest that it is not a calculated copy, but a genuine innovation and outside the scope of the patent holder's invention.

Although the proposed standard falls far short of a bright line rule, it should prove easier to apply and more predictable than the otherwise uncabined "substantial difference" test adopted below. Application of a substantial difference test could, in appropriate cases, help determine which accused products and processes are sufficiently different in operation or structure that they were clearly not contemplated by the patent holder. But the test does not provide a means for establishing the affirmative case required by the patent bargain: that the accused product or process *is* within the invention for which the patent was granted. Thus, the proposed standard, which requires such an affirmative showing, is far more consistent

with the patent bargain, because it enforces the patent holder's power over his invention, and only his invention.

The substantial difference test, in comparison, merely asks the adjudicator to determine whether the accused product or process is substantially different from the patent claim—after both have been invented. This after-the-fact inquiry, unlimited by any consideration of what the patent holder understood or imagined while conceiving his invention and reducing it to practice, almost invariably sweeps in far more than the patent holder actually invented.

Furthermore, the additional gloss adopted by the court below, that elements known to be interchangeable with elements in the patent claims may be automatically substituted when assessing liability, guarantees a result inconsistent with the patent bargain. If the elements were known to be interchangeable at the time the patentee applied for the patent, then the only explanations for their not being included in at least one of the broad claims is either that the patentee did not imagine using such elements in this context, or that he specifically rejected them. There is no patent law purpose served by granting the patentee control over inventions he failed to invent or purposefully rejected. The rule is even more absurd when applied to pure combination patents. In these, all the elements are old art and well known to practitioners. The sole "inventive" act is to combine them. Under the Federal Circuit rule, however, the inventor of one combination is given control over many other combinations the inventor plainly did not think to combine.

In contrast, asking whether the accused product or process comes within the scope of what the patent holder actually invented refocuses the inquiry on the rights promised the patent holder in return for his disclosure.

## 2. Enablement

A related, and necessary, safeguard would be to require that the patent, as written, enable a person of

ordinary skill in the art to construct and use the accused product or process.<sup>13</sup> Thus, recovery for alleged copying would only be available where the information provided in the patent specification would permit someone skilled in that technical area to figure out how to construct and use the alleged copy—either because the necessary steps are described or because they would be obvious to someone who worked in that field.

An enablement test ensures that the patent holder has performed his obligations under the patent bargain by making a disclosure sufficient to enable others to make and use the invention.<sup>14</sup> And this is a test clearly met in *Graver Tank*, where the patent specification expressly taught that the composition at issue could be substituted.

Absent such a test, and it is absent in the doctrine defined below, a nonsensical incongruity is created. The patent holder is permitted to recover when he has no claim covering the defendant's product or process, even though he could not have recovered if there were a claim literally infringed by it. He could not have recovered for literal infringement because the patent would have been found invalid for failing to satisfy the requirements of Section 112, which requires patents to provide sufficient information to enable others to make and use the invention.<sup>15</sup> By introducing an enablement test into the

<sup>13</sup> This is not to suggest that the patent must enable others to make and use every aspect of every product or process that infringes under the doctrine of equivalents. Where the accused product or process includes not only apparatus or method steps that are alleged to infringe under the doctrine of equivalents but also equipment or method steps that are not alleged to infringe, the proposed test would require only that the patent enable a person of ordinary skill in the art to make and use the apparatus or method steps alleged to infringe under the doctrine.

<sup>14</sup> See Laura Handley, *Refining the Graver Tank Analysis with Hypothetical Claims: A Biotechnology Exemplar*, 5 Harv. J. of L. & Tech. 31, 55 (1991).

<sup>15</sup> "The specification shall contain a written description of the invention, and of the manner and process of making and using it,

doctrine of equivalents inquiry, this incongruity is eliminated, and the patent bargain reinstated.

For similar reasons, an enablement test would also bring the doctrine of equivalents in line with the so-called reverse doctrine of equivalents. The reverse doctrine of equivalents recognizes that an accused product or process may appear to fall within the literal terms of a patent claim but nonetheless be entirely distinguishable from the patent holder's invention. See *Graver Tank*, 339 U.S. at 608. A key method of determining whether an accused product or process falls within the scope of a patented invention is by analyzing whether the patent would have suggested the product or process adopted by the alleged infringer. If the patent would not have suggested the accused product or process, then the accused product or process does not literally infringe the patent—even though it fits within the words of the claims. *Boyden Power-Brake Co. v. Westinghouse*, 170 U.S. 537, 573 (1898) (no infringement because the patent “would scarcely have suggested the method [defendant] adopted to accomplish these results”). Thus, under the reverse doctrine of equivalents enablement is required to establish literal infringement. It is, therefore, inexplicable that enablement would not also be required to establish infringement under the doctrine of equivalents.

### 3. Patent Prosecution Disclaimers

Consistent with confining the doctrine of equivalents to providing patent holders with the power to prevent unscrupulous copyists from stealing their inventions, express disclaimers during patent prosecution should be regarded as defining the inventions. Express limitations or other changes made during prosecution are made by the inventor, generally to satisfy a concern of the examiner.

in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same.” 35 U.S.C. § 112.

They are made voluntarily. If the applicant believes the examiner is wrong, he has the right to appeal the decision. Thus, if the applicant chooses instead to rewrite the claims, and/or specification, it evidences his understanding that the abandoned elements were inaccurate or unnecessary to claim the invention. Furthermore, the disclaimer is part of the public record and thus furnishes notice to other inventors that the invention patented does not include the elements that were abandoned.

The rule that patent holders may not retrieve under the doctrine of equivalents what they voluntarily surrendered during patent prosecution was, until the decision below, well established. See, e.g., *Exhibit Supply Co.*, 315 U.S. 136 (amendments adopted in response to rejection for failure to claim the invention and inclusion of inoperative embodiments in the claims); see also *Schriber-Schroth Co.*, 311 U.S. at 221; *Magic City Kennel Club*, 282 U.S. at 790; *I.T.S. Rubber Co.*, 272 U.S. at 443. The position adopted below, however, is that patent holders may retrieve under the doctrine of equivalents what they voluntarily surrendered during patent prosecution, *unless* the specific element was surrendered to avoid prior art. Courts are therefore required to look behind the disclaimer in the patent's file wrapper and inquire *why* the patent holder abandoned the earlier description of his invention, and under most circumstances, the abandonment does not operate as a bar to recovery under the doctrine of equivalents.

To the extent that this rule imposes a bar only where what was disclaimed would also have been invalid under the prior art, the court below, as a practical matter, repealed the long-established estoppel bar altogether. This is because the bar, as limited, is just a subset of the rule that the doctrine of equivalents does not reach products or processes that were anticipated or obvious in light of prior art. Further, it is unclear how any bar of greater breadth could survive the court's reasoning. The

bases for applying the bar under other circumstances—the notions that the public should be able to rely on such public disclaimers and that the disclaimers evidence the patent applicant's understanding of the scope of the invention—were perforce rejected by that court. Thus, even if the court intended to preserve the additional—and well-established—rule that a file wrapper disclaimer acts as a bar even where the examiner was wrong about the prior art, it left itself no ground on which to rest such a rule.

The court's abandonment of the disclaimer bar generates uncertainty, which has a negative effect on further innovation, without adding anything of value in establishing or enforcing the patent bargain. The amendment of a claim or specification is a conscious and focused act. Patent applicants can be relied on not to relinquish descriptions of their inventions under these circumstances, absent prior art, that accurately portray their inventions. Thus, a patent applicant may limit a claim to exclude embodiments he does not believe are operable or may change language that is susceptible to a variety of readings to language that more accurately describes his invention. Under neither circumstance does it serve the public to permit the applicant to later recant those changes when faced with a product or process from someone whose conceptual approach or research permitted him to draw different conclusions.

A doctrine of equivalents, aimed at protecting patent holders from unscrupulous copyists—and carefully cabined to limit the protection to the invention the patentee conceived, disclosed, and did not publicly disclaim—could reinforce the patent bargain without injecting the uncertainty and disincentives created by the decision below and its immediate predecessors.

### III. APPLICATION OF THE DOCTRINE OF EQUIVALENTS IS PROPERLY A QUESTION FOR THE JUDGE, NOT THE JURY.

The doctrine of equivalents must be grounded, if at all, in the court's equitable jurisdiction. It is not provided for by the patent statute which, in contrast, requires patent holders to publicly claim the full and exact scope of what the applicant purports to have invented. See 35 U.S.C. § 112. Application of the doctrine is therefore properly consigned to the court rather than a jury.

Historically, the doctrine of equivalents has generally been applied by the courts. The traditional doctrine of equivalents, because it was simply a gloss on the proper scope of a patent, was routinely applied by judges in the course of determining such questions. The modern doctrine of equivalents that emerged in, and following, *Graver Tank*, however, because it is justified on equitable grounds, provides a distinct basis for consigning its application to judges rather than juries.

That decision, of course, did not expressly discuss whether the doctrine of equivalents was an equitable or a legal right, but the doctrine as described carried the indicia and coloration of an equitable right. That it was applicable only after a determination that the accused product or process did not literally infringe, 339 U.S. at 607, fit the equitable paradigm of an alternative applicable only when no legal remedy was available. Further, the doctrine was not discussed in reference to any statutory provision but described as a doctrine that “evolved” and was applied by the courts “when the proper circumstances” arise as protection from those who “practice a fraud on a patent,” *id.* at 608, apparently as an exercise of the court's jurisdiction to do equity notwithstanding the absence of legislative authority. As, five years before, the Court had found a right to relief from enforcement of a patent obtained by failing to report material information to

the Patent Office, the Court appeared in *Graver Tank* to find a right to relief from copiers in the traditional equitable "jurisdiction . . . to give relief for frauds." *United States v. American Bell Tel. Co.*, 128 U.S. 315, 370 (1888). Both doctrines, fashioned after the merger of law and equity, represented assertions of judicial power to provide relief where the victim of the fraud had no remedy under the provisions of the statute.

Certainly courts and commentators understood the decision in this way. See, e.g., *Texas Instruments Inc. v. United States ITC*, 988 F.2d 1165, 1173 (Fed. Cir. 1993) (doctrine "judicially devised to do equity where no literal infringement" to prevent pirating of patentee's invention); *Valmont Indus. v. Reinke Mfg. Co.*, 983 F.2d 1039, 1043 (Fed. Cir. 1993) ("equitable tripartite test of the doctrine of equivalents," a doctrine which "equitably expands exclusive patent rights"); *American Home Prods. Corp. v. Johnson & Johnson*, 25 U.S.P.Q.2d (BNA) 1954, 1957 (Fed. Cir. 1992) ("application of the equitable powers of the court under the doctrine of equivalents"); *Perkin-Elmer Corp. v. Westinghouse Elec. Corp.*, 822 F.2d 1528, 1532 (Fed. Cir. 1987) ("the doctrine of equivalents is designed to do equity, and to relieve an inventor from a semantic strait jacket when equity requires"); *Loctite Corp. v. Ultraseal Ltd.*, 781 F.2d 861 (Fed. Cir. 1985). Similarly, in Donald Chisum's multi-volume treatise, the doctrine of equivalents is described as an "equitable doctrine,"<sup>16</sup> and in the writings of other commentators, as "an equitable thumb on the patentee's side of the policy balance,"<sup>17</sup> "a creature of equity,"<sup>18</sup> and

<sup>16</sup> 4 Donald S. Chisum, *Patents* § 18.04 (1995).

<sup>17</sup> Devon Burton, *Bringing Theory into Practice: Predictable Scope for Functional Patent Claims*, 42 UCLA L. Rev. 221, 229-30 (1994).

<sup>18</sup> Thomas Landry, *Certainty and Discretion in Patent Law: The On Sale Bar, the Doctrine of Equivalents, and Judicial Power in the Federal Circuit*, 67 S. Cal. L. Rev. 1151, 1193 (1994).

"equitable in origin."<sup>19</sup>

Moreover, reconstitution of the doctrine of equivalents as an equitable doctrine to provide relief against deliberate, but cunning, copying was, and is, a sensible response to the focus in modern patent law and practice on comprehensive claims. See 35 U.S.C. § 112. To simply relieve patent holders of that obligation under the doctrine of equivalents, as the court below has done, without invoking the courts' equitable jurisdiction to provide relief from fraud, is judicial repeal of unambiguous legislation. In contrast, a doctrine of equivalents fashioned by the court, as an exercise of its inherent equitable jurisdiction, to provide relief in limited circumstances—the fraudulent misuse of the patentee's disclosure—is more easily reconciled with the provisions of the patent statute.

As an exercise of power grounded in equity, the doctrine of equivalents is necessarily outside the scope of the Seventh Amendment right to jury trial. See *Ross v. Bernhard*, 396 U.S. 531, 538 (1970).<sup>20</sup> This is how the analogous inequitable conduct issue has been viewed. See, e.g., *Paragon Podiatry Lab, Inc. v. KLM Labs., Inc.*, 984 F.2d 1182, 1190 (Fed. Cir. 1993) ("inequitable conduct in a patent suit, being entirely equitable in nature, is not an issue for a jury to decide[, it] is a discretionary decision to be made by the judge on his or her own factual findings"); *Concept Design Elecs. & Mfg. v. Duplitronics*,

<sup>19</sup> Harold Wegner, *Equitable Equivalents: Weighing the Equities to Determine Patent Infringement in Biotechnology and Other Emerging Technologies*, 18 Rutgers Computer & Technology L.J. 1 (1992).

<sup>20</sup> In patent law, the traditional Seventh Amendment inquiry into 1791 English practice has not proved particularly helpful. In 1791, patent rights could be asserted in courts of both law and equity. Issues such as scope of claims and infringement were cognizable in both and, although there were differences in the relief available, remedies available from courts of equity included monetary as well as injunctive relief.

*Inc.*, 34 U.S.P.Q.2d (BNA) 1789 (Fed. Cir. 1995) (same).

The close parallels between the doctrines argue for an identical conclusion with respect to the modern doctrine of equivalents. To the extent application of either doctrine involves issues of fact in common with legal claims, of course, the parties retain the right to have those questions tried to a jury first, to avoid invading the jury right attaching to the legal claims by the operation of collateral estoppel. See *Ross v. Bernhard*, 396 U.S. at 537-38. With that admonition, however, the modern doctrine of equivalents, as it emerged from *Graver Tank*, and as it is detailed here, is an equitable issue, properly consigned to the discretion of the judge, and reviewed under an abuse of discretion standard.

#### CONCLUSION

Because the decision below is fundamentally at odds with the intent and purpose of the patent system, in which "free exploitation of ideas will be the rule, to which the protection of a federal patent is the exception,"<sup>21</sup> *amicus* respectfully asks this Court to reverse that decision.

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<sup>21</sup> *Bonito Boats*, 489 U.S. at 151.